

**SELECTION STATEMENT
FOR
MECHANICAL SYSTEMS ENGINEERING SERVICES II/B**

On January 10, 2007, I along with senior officials at Goddard Space Flight Center met with members of the Source Evaluation Board (SEB) to hear their findings based on the evaluation of proposals for the Mechanical Systems Engineering Services (MSES) II/B solicitation.

PROCUREMENT DESCRIPTION AND HISTORY

This small business set-aside competitive procurement will produce a contract to secure mechanical engineering services for the Applied Engineering and Technology Directorate at Goddard Space Flight Center for a five-year ordering period. Under this effort, the Contractor shall provide mechanical engineering support services for the study, design, development, fabrication, integration, testing, verification, and operations of space flight, airborne, and ground system hardware and software, including development and validation of new technologies to enable future space and science missions.

The resultant contract will be a cost plus award fee, indefinite delivery, indefinite quantity (IDIQ) type contract.

A draft Request for Proposal (RFP) was issued April 27, 2006 for industry comments. A pre-solicitation conference was held on May 17, 2006. The final RFP was released June 13, 2006. Subsequently, three amendments followed to make changes to the solicitation: Amendment 1 (issued June 16, 2006) added Exhibit 10, providing guidance on the development of a project/subsystem analysis plan for information purposes and responded to questions received from industry. Amendment 2 (issued June 30, 2006) changed the start date for Representative Task Order (RTO) #1 and made an administrative correction. Amendment 3 (issued November 2, 2006) extended the acceptance period of offers through January 31, 2007. The following companies submitted written proposals by the July 13, 2006 due date:

Sigma Space Corp.
4801 Forbes Blvd.
Lanham, MD 20706

Global Science & Technology, Inc.
7855 Walker Drive, Ste 200
Greenbelt, MD 20770

Jackson and Tull
7375 Executive Place, Suite 200
Seabrook, MD 20706

Bastion Technologies, Inc.
17625 El Camino Real, Suite 330
Houston, TX 77058

EVALUATION PROCEDURES

The evaluation was conducted in accordance with the source selection procedures identified in Federal Acquisition Regulation (FAR) Subpart 15.3 and NASA FAR Supplement (NFS) Subpart 1815.3. The SEB procedures contained in NFS 1815.370 were also applied.

The RFP defined the evaluation factors as Mission Suitability, Cost/Price and Past Performance. The RFP specified the relative order of importance of the evaluation factors as follows: "The Cost Factor is significantly less important than the combined importance of the Mission Suitability Factor and the Past Performance Factor. As individual Factors, the Cost Factor is less important than the Mission Suitability Factor but more important than the Past Performance Factor."

The RFP established that only the Mission Suitability evaluation factor would be point scored in the evaluation process. The Mission Suitability factor consisted of the following sub-factors with assigned points as indicated:

Mission Suitability Sub-Factors	Points
Sub-factor A - Understanding Requirements of SOW	300
Sub-factor B – Technical Approach to RTO's	300
Sub-factor C - Management Plan	350
Sub-factor D - Safety & Health Plan	50
<i>TOTAL</i>	1,000

Prior to the issuance of the RFP, the SEB developed detailed evaluation criteria and the numerical scoring system for Mission Suitability as delineated above. The RFP explained the evaluation procedures, and specifically described the evaluation factors and sub-factors, provided the Mission Suitability numerical scoring scheme and specified the criteria to be used in the evaluation.

Regarding the Cost/Price Factor, the cost evaluation was conducted in accordance with FAR 15.305(a)(1); NFS 1815.305(a)(1)(B) and (C); and RFP clause M.5 – Cost Evaluation Factor.

The Past Performance evaluation was conducted in accordance with FAR 15.305(a)(2) and NFS 1815.305(a)(2). Within the Past Performance factor, an Offeror, along with its teaming partner(s) and/or significant subcontractor(s), were evaluated in a variety of technical and business areas. The SEB considered both the relevance of the previous work to MSES II/B and the Offeror's performance of that work. The Past Performance factor was not scored. To assist in evaluating the Past Performance factor, the RFP provided the following ratings: Excellent, Very Good, Good, Fair, Poor, and Neutral.

EVALUATION PROCESS

As NASA's Source Selection Authority for this procurement, I appointed the SEB, along with a team of technical consultants and business/management analysts, comprised of members from appropriate disciplines, to assist in proposal evaluation.

Operating as an Integrated Evaluation Panel (IEP), along with the use of technical consultants and business/management non-voting members, the SEB completed its initial evaluation of the four (4) proposals and the presentation to myself on January 10, 2007, and documented its findings in a written report. Through this process, the SEB assessed the strengths and weaknesses of each proposal and adjectivally rated and point scored the proposals for each Mission Suitability sub-factor.

The SEB evaluated the Past Performance factor for current and/or completed contracts for the prime and subcontractors. The Past Performance factor included the SEB's evaluation of each offeror's record of performing services or delivering products that are similar in size, content, and complexity to the requirements. The Past Performance factor was assigned an adjectival rating of Excellent, Very Good, Good, Fair, Poor, or Neutral depending on the SEB's assessment of each proposal in this area.

Additionally, the SEB assessed the reasonableness of the proposed costs and conducted a cost realism analysis. The cost realism analysis was used to determine the probable cost for the entire five-year ordering period.

The SEB then applied the established numerical weights to each Mission Suitability sub-factor and produced a final Mission Suitability score for each proposal. The Mission Suitability findings and associated score, the proposed and probable cost assessments, and the Past Performance were presented to me as the Source Selection Authority.

MISSION SUITABILITY EVALUATION

After scoring each sub-factor in accordance with the weights delineated in the RFP, the scores based on total Mission Suitability points, placed the proposals in the following order:

1. Bastion Technologies, Inc.
2. Global Science & Technology (GST)
3. Sigma Space Corporation
4. Jackson & Tull (J&T)

The substance of the SEB's evaluation of Mission Suitability for each proposal follows:

Bastion Technologies, Inc. (Bastion)

The Bastion proposal received an overall adjectival rating of "Excellent" and the highest Mission Suitability score exceeding the competing Offerors' score by a significant amount. Out of the four sub-factors for Mission Suitability, the Bastion proposal received the highest score in sub-

factors A, B, C & D. The Bastion proposal received the following rating for each individual subfactor:

Subfactor A - Understanding Requirements of SOW	Excellent
Subfactor B - Technical Approach to RTO's	Very Good
Subfactor C - Management Plan	Excellent
Subfactor D - Safety and Health Plan	Excellent

Sub-factor A - Understanding Requirements of SOW

The Bastion proposal received two significant strengths and two strengths. The significant strengths identified were, as follows: (1) The offeror develops a complete and comprehensive set of technical challenges based on the MSES II/B statement of work (SOW). A superior understanding of risk management implementation and includes an excellent and detailed set of relevant techniques, procedures, risks, and risk mitigation strategies/approaches for each sub-function of the Statement of Work; and (2) The offeror demonstrates an excellent and comprehensive understanding of Function 2, Implementation Phase Services – Mechanical Systems Disciplines. The strengths identified were, as follows: (1) The offeror demonstrates a very good understanding and technical approach to performing tasks in the area of SOW Function 1, Pre-Formulation and Formulation Services: Candidate Studies Services, Preliminary Analysis Study Services, and Systems Definition Study Services; and (2) The offeror demonstrates a very good understanding, detail, and approach to several areas of Function Three: Implementation Phases Services – Related Discipline Engineering specifically, Detector Engineering, Parts and Materials, Configuration Management, and Training.

Sub-factor B – Technical Approach to RTO's

The Bastion proposal received one significant strength, one strength and one weakness. The significant strength identified was, as follows: The Offeror demonstrates an excellent overall approach and superior understanding of RTO-2 task objectives and presents a complete, thorough and detailed discussion of technical challenges and associated risks. The strength identified was, as follows: The Offeror demonstrates a complete and thorough understanding of the RTO – 1 technical tasks, objectives, challenges and risks, and presents a technical approach that greatly enhances the potential for successful performance. The weakness identified was, as follows: The Offeror presents an inconsistent assumption in RTO-1 which was factored into adjustments to the staffing plan.

Sub-factor C - Management Plan

The Bastion proposal received one significant strength and four strengths. The significant strength identified was, as follows: The Offeror provides an excellent web-based/enabled contract management system, for managing all tasks, work, and Prime and subcontractor performance that is associated with the MSES II/B effort. The strengths identified were, as follows: (1) The Offeror proposes a Management Plan and Organization Structure that provides the Government with detailed insight and rationale of the Offeror's plans to manage, monitor, and control the complex interactions between the MSES II/B technical requirements, and prime

and subcontractor arrangements; (2) The Mission Assurance Plan is comprehensive, providing a very good discussion of various aspects of the Mission Assurance discipline; (3) The Offeror's team has access to an extensive list of critical facilities and equipment which have been defined. These facilities are available to the Offeror's team effort from the beginning of the contract; (4) The Offeror is certified to ISO 9001:2000 standard.

Sub-factor D - Safety & Health Plan

The Bastion proposal received one significant strength. The Offeror's safety and health plan significantly exceeds the requirements identified in NPR 8715.3 greatly enhancing the potential for successful performance.

The SEB found no significant weaknesses and no deficiencies in the Bastion proposal.

Global Science and Technology, Inc (GST)

GST's proposal received an overall adjectival rating of "Very Good" and the second highest Mission Suitability score. GST's overall score was significantly lower than the highest score. The GST proposal received the following rating for each individual subfactor:

Subfactor A - Understanding Requirements of SOW	Good
Subfactor B - Technical Approach to RTO's	Good
Subfactor C - Management Plan	Excellent
Subfactor D - Safety and Health Plan	Good

Sub-factor A - Understanding Requirements of SOW

The GST proposal received the following weakness in sub-factor A: The Offeror presents limited discussion and does not provide adequate detail for their planned implementation approach to mitigate technical challenges identified within SOW Sub-factor A functional areas.

Sub-factor B – Technical Approach to RTO's

The GST proposal received two strengths, which were identified as follows: (1) A thorough technical approach and understanding of RTO-2 with comprehensive background discussions, detailed design and analysis, and risk mitigation using the Engineering Test Unit (ETU); (2) A thorough and detailed approach and discussion that includes an estimate of "additional resources" required to complete all plans, procedures and deliverables associated with both RTOs.

Sub-factor C - Management Plan

The GST proposal received one significant strength and three strengths. The significant strength identified was, as follows: (1) The Offeror's web-based and enabled system provides an excellent framework for managing work associated with the MSES II/B contract. The strengths identified were, as follows: (1) The Offeror thoroughly discusses and identifies the functional

split of responsibilities and roles for themselves and their subcontractors while identifying a sound plan to develop future capability with mentoring assistance from identified subcontractors;
(2) The Offeror's team has an extensive list of critical facilities and equipment which have been defined and are accessible for use on the MSES II/B effort from the beginning of the contract;
(3) The Offeror is certified to ISO 9001:2000 standard.

Sub-factor D - Safety & Health Plan

The GST proposal received one strength: The Offeror's safety and health plan exceeds the requirements of NPR 8715.3 appendix H.

The SEB found no significant weaknesses or deficiencies in the GST proposal.

Sigma Space Corporation (Sigma)

Sigma's proposal received an overall adjectival rating of "Good" and the third highest Mission Suitability score. Sigma's overall score was significantly lower than the highest score. The Sigma proposal received the following rating for each individual subfactor:

Subfactor A - Understanding Requirements of SOW	Very Good
Subfactor B - Technical Approach to RTO's	Good
Subfactor C - Management Plan	Good
Subfactor D - Safety and Health Plan	Fair

Sub-factor A - Understanding Requirements of SOW

The Sigma proposal received one significant strength, one strength and one weakness. The significant strength identified was, as follows: A thorough and detailed understanding of Function Two: Implementation Phases Services – Mechanical Systems Disciplines. The strength was identified as follows: The Offeror demonstrates a good understanding and approach to SOW Function 1C - Systems Definition Study Services. The weakness was identified as follows: The Offeror provides limited detail and an inadequate discussion in the area of contamination from lubricants and coatings at cryogenic temperatures (Function 3).

Sub-factor B – Technical Approach to RTO's

The Sigma proposal received two strengths and one weakness. The strengths were identified as follows: (1) The Offeror demonstrates a thorough and complete understanding of RTO-1 requirements, and includes a good set of technical assumptions, issues, risks and mitigation strategies; and (2) The Offeror demonstrates a good and thorough understanding of the technical requirements of RTO-2. The Offeror's technical discussion presents logical and comprehensive assumptions, risks and mitigation strategies. The weakness was identified as follows: The Offeror presents an inadequate staffing plan for RTO-2. This led to minor staffing adjustments: the IEP added hours to direct labor estimates and one labor category to RTO-2.

Sub-factor C - Management Plan

The Sigma proposal received one strength and two weaknesses. The strength identified was, as follows: The Offeror presents a detailed and thorough discussion of an effective technique for developing and maintaining a workforce with comprehensive plans for mentoring and training (including subcontractor and Government personnel). The weaknesses identified were, as follows: (1) The Offeror provides an incomplete discussion of their planned organizational structure, policies and procedures for accessing, monitoring and controlling subcontractor arrangements; (2) The Offeror provides limited detail and inadequate discussion regarding mitigation strategies to resolve conflict(s) with team mates or subcontractors.

Sub-factor D - Safety & Health Plan

The Sigma proposal received one weakness: The Offeror has provided a generic Safety and Health plan that provides limited discussion and does not meet the requirements of the RFP.

The SEB found no significant weaknesses or deficiencies in the Sigma proposal.

Jackson & Tull (J&T)

J&T's proposal received an overall adjectival rating of "Good" and the fourth highest Mission Suitability score. J&T's overall score was significantly lower than the highest score. The J&T proposal received the following rating for each individual subfactor:

Subfactor A - Understanding Requirements of SOW	Good
Subfactor B - Technical Approach to RTO's	Good
Subfactor C - Management Plan	Good
Subfactor D - Safety and Health Plan	Fair

Sub-factor A - Understanding Requirements of SOW

The J&T proposal received five strengths and one weakness. The strengths identified were, as follows: (1) A good understanding and approach to SOW Function 1B - Preliminary Analysis.; (2) The Offeror demonstrates a good understanding of SOW requirements for Function 2A, Materials Engineering; (3) The Offeror demonstrates a good level of understanding of SOW requirements for Function 2F, Contamination and Coatings Engineering; (4) The Offeror demonstrates a thorough understanding of the complete scope of SOW Function 3B - Instrument Systems; (5) The Offeror demonstrates a solid understanding and presents a detailed approach to Function Five: Support Services (Photo and Video Specific Tasks). The weakness was identified as follows: The Offeror provides a limited discussion that does not adequately demonstrate an understanding of SOW Function 2D - Electro-Mechanical Engineering.

Sub-factor B - Technical Approach to RTO's

The J&T proposal received one strength and three weaknesses. The strength was identified as follows: The Offeror demonstrates a good understanding of RTO - 1 technical objectives by presenting a detailed summary of relevant performance requirements and an insightful

preliminary test plan with early inputs from systems level personnel. The weaknesses were identified as follows: (1) The Offeror presents limited discussion and inadequate detail of identified trade studies, risks, and mitigation plans for the Thermal Control System (TCS) Task Plan in RTO-1. A separate TCS staffing plan is presented that is confusing and does not match the RTO-1 master schedule and staffing plan; (2) The Offeror's technical discussion presented in RTO-2 offers limited insight and background into the methodology and approach employed to establish and utilize their 'Technical Point of Departure' baseline design. The text provides conclusions with limited technical foundation, inadequate detail or synergy between heritage and baseline designs; (3) Based on the Offeror's approach, moderate staffing adjustments were required in order to accomplish RTO objectives: additional hours needed to accomplish the RTO objectives, resulting in a direct labor cost increase and the addition of three (3) labor categories in comparison with the Offeror's proposal.

Sub-factor C - Management Plan

The J&T proposal received two strengths and one weakness. The strengths identified were, as follows: (1) The Offeror presents a notable approach and methodology of using Small and Small/Disadvantaged Businesses within the MSES II/B effort; and (2) The Offeror is certified to ISO 9001:2000 standard. The weakness identified was, as follows: The Offeror provides limited information and inadequate detail of management policies and procedures for monitoring and controlling subcontracting arrangements. These subcontracting arrangements may be responsible for a significant percent of the total work of the MSES II/B contract.

Sub-factor D - Safety & Health Plan

The J&T proposal received one (1) weakness: The Offeror's safety and health plan glosses over many subjects and does not meet the requirements identified in the RFP.

The SEB found no significant weaknesses or deficiencies in the J&T proposal.

COST/PRICE EVALUATION

The SEB evaluated the proposed cost for the total five-year effort to determine reasonableness and cost realism. The cost evaluation for the MSES II/B procurement was conducted in accordance with FAR 15.305(a) (1) and NFS 1815.305(a)(1)(B) and (C) and RFP Clause M.5 – Cost Evaluation Factor.

As stated in Section M of the RFP, the Total Composite Contract (prime/sub) Loaded Rate for each Government Contract Direct Labor Category in Exhibit 1A was applied against an established Government direct labor hour pricing model. The Government labor hours were not provided to the Offerors. The Government applied recurring ODCs, proposed in Exhibit 7, to the Government's Pricing Model for evaluation of Total Contract Proposed and Probable Cost. Cost realism analysis was performed on the overall proposed contract cost (Government Pricing Model, Exhibit 1A). The Contract Direct Labor Loaded Rates proposed in Exhibits 2A and 2B

were evaluated for reasonableness. The cost realism analysis was not subject to a Mission Suitability point score adjustment.

In addition, a cost realism analysis was performed on the overall cost proposed for the two RTOs. The RTO's cumulative cost realism analysis results were subject to a Mission Suitability point score adjustment. The RFP stated that Mission Suitability scores would be downwardly adjusted based on the degree of cost realism based on a structured approach contained in RFP Provision M.4.3, Adjustment for Cost Realism.

In accordance with the NFS, the SEB analysis included a level of confidence in the probable cost assessment for each proposal. The confidence that the SEB placed in the probable costs was high for all four offerors.

After making these adjustments, the SEB ranked the probable costs of the proposals in the following order, from lowest probable cost to highest probable cost: Bastion, J&T, Sigma, and GST. In terms of the range of the probable costs, Bastion's was slightly lower than J&T, moderately lower than Sigma's and significantly lower than GST.

Bastion had the lowest total contract proposed and probable cost. A cost realism analysis was performed on the overall proposed cost which resulted in minor adjustments in determining the probable cost. A cost realism analysis was also performed on the overall cost proposed for the two RTOs. Cost realism adjustments were made to the skill mix and staffing levels of the RTOs. These adjustments did not necessitate a reduction of the Mission Suitability score.

GST had the highest total contract proposed and probable cost. A cost realism analysis was performed on the overall proposed cost which resulted in minor adjustments in determining the probable cost. A cost realism analysis was also performed on the overall cost proposed for the two RTO. No cost realism adjustments were made to the skill mix or staffing levels of the RTOs.

Sigma had the second highest total contract proposed and probable cost. A cost realism analysis was performed on the overall proposed cost which resulted in minor overall adjustments in determining the probable cost. A cost realism analysis was also performed on the overall cost proposed for the two RTOs. Cost realism adjustments were made to the skill mix and staffing levels of the RTOs. These adjustments did not necessitate a reduction of the Mission Suitability score.

J&T had the second lowest total contract proposed and probable cost. A cost realism analysis was performed on the overall proposed cost which resulted in minor adjustments in determining the probable cost. A cost realism analysis was also performed on the overall cost proposed for the two RTOs. Cost realism adjustments were made to the skill mix and staffing levels of the RTOs in order to meet minimum requirements. J&T's probable costs exceeded their proposed cost by more than 10.99%, resulting in a Mission Suitability point score adjustment.

PAST PERFORMANCE EVALUATION

The SEB evaluated each Offeror's Past Performance, along with that of its teaming partner(s) and/or significant subcontractor(s). The evaluation assessed the relevance and overall performance record of the performance in the following areas: Technical Performance, Schedule Performance, Cost Performance, and Business Relations. Considering all four areas, one of the following adjectival ratings was assigned: Excellent, Very Good, Good, Fair, Poor, or Neutral.

The Bastion team received an overall rating of "Excellent". The SEB reviewed twenty one (21) relevant contracts for Bastion and their team. Most of the questionnaires received, rated the Bastion team's relevant experience across all functions listed in the Statement of Work Survey as "Significant", with a few "Moderate" ratings. Bastion was rated Excellent overall by all of their customers. Their significant subcontractors also received overall ratings of Excellent by their customers.

The GST team received an overall rating of "Excellent". The SEB reviewed a total of thirteen (13) relevant contracts for GST and their significant subcontractors. Most of the questionnaires received rated the GST team's relevant experience across all the Functions listed in the Statement of Work Survey as "Significant". GST and their significant subcontractors overall ratings were mostly Excellent with a few Very Good ratings by their customers.

The Sigma team received an overall rating of "Excellent". The SEB reviewed a total of sixteen (16) relevant contracts for Sigma and their significant subcontractors. Most of the questionnaires received rated the Sigma team's relevant experience across all the Functions listed in the Statement of Work Survey as "Significant". Overall, Sigma was rated mostly Excellent and Very Good by their customers. Overall, Sigma's significant subcontractors received overall ratings of mostly Excellent, with a few Very Good ratings and Good ratings by their customers.

The Jackson & Tull team received an overall rating of "Very Good". The SEB reviewed a total of five (5) relevant contracts for J&T and their significant subcontractor. Most of the questionnaires received rated J&T team's relevant experience across all the Functions listed in the Statement of Work Survey as "Significant". Overall, J&T was rated mostly Very Good with one Excellent rating by their customers. Their significant subcontractor received one Very Good and one Excellent rating by their customers.

DECISION

During the course of the presentation, I solicited and considered the views of senior NASA/Goddard personnel who heard the presentation and who have responsibilities related to this procurement, heretofore referred to as "senior officials". I considered the report and the presentation from the SEB along with the views of senior officials in making my decision.

To begin with, based upon the findings of the SEB, and in accordance with FAR 52.215-1, incorporated in the RFP, I determined that a contract may be awarded based upon evaluation of the initial proposals without discussion with the offerors.

Regarding the selection decision, I noted that the Mission Suitability evaluation carries greater weight than the Cost/Price evaluation, which, in turn, carries greater weight than the Past Performance evaluation. I also noted that Cost/Price evaluation is significantly less important than the combined importance of the Mission Suitability evaluation and the Past Performance evaluation.

In addition to the presentation materials, I carefully reviewed the SEB's final report. This review provided the factual background and analytical context to understand and consider the materials and views presented. The Mission Suitability evaluation provides the key technical discriminators to assist in making the selection.

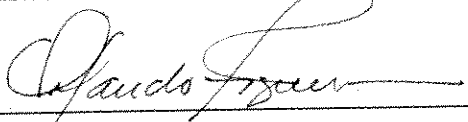
Regarding Mission Suitability, the SEB found significant differences amongst the proposals, rating the Bastion proposal "Excellent," the GST proposal "Very Good" and Sigma and J&T, "Good." By assigning point scores to its evaluation, the SEB made these ratings even more precise, highlighting the clear distinction between the offerors.

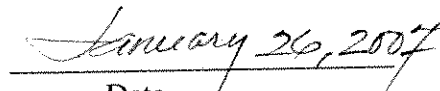
The Bastion proposal demonstrates an outstanding understanding of the MSES II/B requirement, both for the various Functions of the Statement of Work (SOW) and the hypothetical problems associated with the RTOs. The Bastion proposal also demonstrated an exceptional and effective contract management and performance monitoring system and an innovative in-depth management plan which will monitor and control the complex interactions between technical requirements and prime and sub-contractor arrangements. It also needs to be noted that the Bastion proposal significantly exceeded the requirements within the Safety and Health Sub-factor, providing exhaustive amounts of detailed information tailored specifically to the MSES II/B effort.

With regard to cost, an objective analysis of the proposals shows Bastion as having the lowest probable cost; slightly lower than the next lowest priced offeror; moderately lower than the next offeror; and significantly lower than the highest priced offeror. I note that adjustments made by the SEB to the actual proposed costs to determine the probable costs were minor for all proposals and did not change the cost standings for any offeror. Accordingly, the SEB placed a high level of confidence in the probable costs for each proposal.

Regarding the Past Performance evaluation factor, three of the four technically competitive proposals received ratings of "Excellent" and the fourth received a rating of "Very Good". Given the level of relevant experience and the fact that the Offerors' past performance is relatively comparable and considering the fact that past performance is the least important factor, I consider the Past Performance factor to not be a discriminator in my selection decision.

In view of the preceding discussion and the relative importance of the evaluation factors put forth in the RFP, I have concluded that the Bastion proposal represents the best value to the Government. The superior technical performance demonstrated in the Mission Suitability section, coupled with the lowest proposed and probable cost, and excellent past performance results in Bastion offering the best value to the Government. Consequently, I have selected Bastion for award of the Mechanical Systems Engineering Services II/B contract.


Orlando Figueroa
Director of Applied Engineering
And Technology Directorate


Date